

**DEPARTMENT OF TRANSPORTATION  
RICHMOND, VIRGINIA**

**REPORT ON AUDIT  
FOR THE YEAR ENDED  
JUNE 30, 1999**

***AUDITOR OF  
PUBLIC  
ACCOUNTS***



***COMMONWEALTH OF VIRGINIA***

## **AUDIT SUMMARY**

Our audit of the Department of Transportation for the year ended June 30, 1999, found:

- Internal control matters that we consider reportable conditions, one of which we consider a material weakness;
- An issue of noncompliance with applicable laws and regulations tested; and
- Inadequate corrective action on prior year audit findings.

Our audit findings include the following:

- Improve Controls over Inventory Policies and Procedures to Prevent a Qualified Financial Statement Opinion;
- Monitor and Comply with Accounting and Reporting Standards and Properly Prepare Financial Statements;
- Properly Manage Inventory;
- Improve Physical Security Controls;
- Improve Securities for Windows NT;
- Perform Physical Inventory for Major Equipment Fixed Assets;
- Develop Policies and Procedures; and
- Improve Controls Over Smart Tag Policies and Procedures.

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## AGENCY HIGHLIGHTS

The Virginia Department of Transportation builds, maintains, and operates the state's roads, bridges, and tunnels. Virginia is the third largest state-maintained highway system in the United States, just behind Texas and North Carolina. Transportation maintains over 55,000 miles of interstate, primary, and secondary roads and distributes state funds to help maintain over 9,000 miles of urban streets. Transportation not only maintains roads but also maintains more than 12,300 bridges, four underwater tunnels, two mountain tunnels, two toll roads, one toll bridge, four ferry services, 41 rest areas, and 98 commuter parking lots.

## INTERNAL CONTROL BACKGROUND, FINDINGS, AND RECOMMENDATIONS AND FINANCIAL INFORMATION

### NEW FINANCIAL MANAGEMENT SYSTEM (FMSII)

During fiscal year 1999, Transportation implemented a new accounting system, Financial Management System (FMS II). The system is equipped with six modules that include project accounting, general ledger, accounts receivable, accounts payable, purchasing, time entry, and leave. Currently, the system manages all financial operations for Transportation. There are over 5,000 users of FMS II throughout the Commonwealth. During fiscal year 1999, FMS II processed over 900,000 expenditure transactions.

The FMS II system is a client/server-based system consisting of a Peoplesoft front-end application, an Oracle Database, and a Windows NT FMS Panel Server. The Oracle Database is running on a Unix AIX Operating System. Transportation networks the system over the Commonwealth Telecommunications Network and various local frame relay networks to all Districts, Area Headquarters, and Residencies.

The total budgeted cost of the FMS II system is \$13,890,529. As of November 1, 1999, Transportation has spent \$13,620,888 or 98 percent of the budget. The remaining portion of the budget will cover system maintenance and version upgrades.

The original implementation date was July 1, 1997; however, management delayed the implementation four times before implementing FMSII on September 1, 1998. It was management's decision not to run FMSII parallel to the former accounting system, FMS, due to the extensive tests performed through FMSII. The server that the system was running on, however, did not have enough capacity to properly run the new system at the time of implementation. System response time was extremely slow. Employees had to work in shifts in order to access and process information through the system. Transportation purchased and installed a new server in the spring of 1999. The system response time delayed the utilization of some processes, such as the initiation of purchases in FMSII, for several months.

Due to system problems, Transportation did not process payments timely and could not comply with the prompt pay requirement. For the quarter ended December 31, 1998, Transportation had a 73 percent compliance rate. This is well below the required 95 percent compliance rate. Transportation did begin to improve slightly with compliance rates of 83.8 percent and 93.1 percent in the third and fourth quarters, respectively. Transportation also paid over \$20,000 in interest on late payments for the quarter ended March 31, 1999. Transportation's overall compliance rate for fiscal year 1999 was 86 percent.

The implementation of FMSII affected many operational processes. Accounting for inventory changed due to the implementation of FMSII. Updates to inventory balances flow through the purchasing module in FMSII, formerly updated directly in the Purchasing and Inventory Management System (PIMS). The slow response of the FMSII system impeded the ability to use the purchasing module for several months.

The FMSII system performance adversely affected operations in several areas as described in the following management issues.

#### Purchasing and Inventory Management System Control Procedures

Transportation uses the Purchasing and Inventory Management System (PIMS) to track inventory. This system, installed in 1989, is a computerized perpetual inventory network system that links all inventory locations statewide. Personnel record stock items received, transferred, and issued through terminals located throughout the state to update the computer system and can inquire about stock availability throughout the state.

The Administrative Services Division is responsible for the establishment, maintenance, and statewide monitoring of the PIMS policies and procedures. For each of the nine Districts, the District Administrator is responsible for the district-wide adherence to PIMS policies and procedures through the operational purview of the District Business Administrator (DBA). The DBA's responsibility includes ensuring the performance of annual independent physical inventory counts and compliance reviews at the district.

Many inventory processes, such as inventory purchases, underwent major changes this year with the implementation of the new Financial Management System (FMSII). PIMS is an inventory management system while FMSII captures the financial aspects of inventory.

#### Improve Controls over Inventory Policies and Procedures to Prevent a Qualified Financial Statement Opinion

At year-end, the Financial Management System (FMSII) and the Purchasing and Inventory Management System (PIMS) differed by over \$22 million. The difference in system balances meant the inventory ranged from \$33 million to \$55 million. Transportation purchased \$39,703,125 in inventory during fiscal year 1999.

Transportation's financial statements and the Commonwealth's Comprehensive Annual Financial Report could have received a qualified audit opinion because of the inventory differences. A qualified audit opinion could negatively impact Transportation's and the Commonwealth's bond ratings.

In addition, by not properly accounting for inventory and its relative cost, Transportation risks losing actual inventory items, improperly charging state and federal projects, and misstating inventory purchases and balances on the financial statements. We consider this lack of controls a material weakness.

Based on the material weakness in internal controls over inventory and the numerous instances of non-compliance with internal policies and procedures discussed below, we could not rely on PIMS for inventory information. Therefore, with the assistance of Transportation's Internal Auditors, we conducted a statewide statistical sample of inventory stock to validate both the item counts and unit costs. Our statistical sample found many inconsistencies and inaccuracies in the counts and per unit costs.

Our statistical sample work allowed us to project the value of inventory at year-end and avoid an opinion qualification. During this sampling work, management increased their efforts to determine the reason for the significant system differences.

Management is not holding the District Administrators, or their designee, responsible for following inventory procedures. The nine District Administrators have ultimate responsibility for the recording and management of inventory in their district. Since District Administrators do not enforce procedures, many

district personnel do not follow them resulting in PIMS containing inconsistent and inaccurate inventory information. Additionally, the District Administrators receive and have access to the tools they need to monitor compliance in their respective districts; however, they do not use them.

This lack of enforcement and the FMSII implementation contributed to the inventory problems as noted below.

- District personnel did not perform all independent physical annual inventory counts and compliance reviews in eight of the nine Districts, which carry a combined inventory value of \$29,386,615. These eight districts did not perform counts or reviews for 8 percent to 70 percent of their stock locations. Richmond District was the only district to complete all of their compliance reviews and independent inventory counts. In addition, 20 percent of the stock locations did not perform their monthly sample inventory counts as of June 1999, and none of the locations performed their monthly counts from September 1998 through February 1999 as Administrative Services Division (ASD) instructed due to system deficiencies during the implementation of FMSII.
- ASD conducted only one compliance review during the year. This review noted a lack of controls and many count errors that resulted in a stock location within the District having to perform a complete inventory count. Even though the PIMS policies and procedures do not require a certain number of compliance reviews, ASD should perform compliance reviews more frequently than once a year to ensure Districts are complying with PIMS policies and procedures.
- ASD did not perform reconciliations between FMSII and PIMS during the fiscal year. However, Financial Accounting and Reporting performed preliminary reconciliations revealing material discrepancies, but did not correct the discrepancies until after year-end. As of December 1999, ASD and Financial Accounting and Reporting are still unable to reconcile inventory balances in FMSII and PIMS.
- ASD has not performed a complete update to the PIMS policies and procedures manual to reflect the procedural changes resulting from the implementation of FMSII.
- District personnel did not follow procedural instructions from ASD resulting in PIMS containing inaccurate information. Upon implementation of FMSII, ASD provided district personnel with procedures to record inventory transactions in PIMS instead of FMSII to compensate for system deficiencies. Not only did district personnel have problems recording the information as instructed, but in February 1999, when ASD instructed the districts to begin entering transactions directly into FMSII, many districts continued to enter transactions in PIMS. At fiscal year end, several districts were still entering transactions directly into PIMS.
- District personnel do not organize warehouses to facilitate management and accounting of inventory. Similar items are not stacked and stored together or labeled. This lack of organization reduces the district's ability to count inventory.

To correct the inconsistencies and inaccuracies in PIMS, Transportation should systematically validate all inventory balances before the end of fiscal 2000. A systematic validation of all inventory balances will provide Transportation with an accurate starting point.

Management needs to ensure that the District Administrators are aware of and use the tools provided by PIMS to monitor inventory, such as reports that identify stock locations not performing their monthly counts, independent counts, or reviews. Management should focus on enforcing procedures as well as performance evaluation expectations for not following procedures for the District Administrators and their designees.

District personnel must perform routine sample monthly counts. A person independent of the direct on-site responsibility for stock at a given location should perform an independent physical inventory count and compliance review, at least once a year. This count must be in addition to and not a substitute for the routine scheduled counts. Any deficiencies found as a result of the independent inventory reviews must be followed up on and documented by the appropriate residency, district, or division level inventory manager.

ASD must perform compliance reviews frequently and reconciliations of PIMS to FMSII monthly. ASD must also provide consistent, authoritative guidance to the district personnel on implementing PIMS policies and procedures.

If Transportation does not systematically validate their inventory, enforce compliance with PIMS policies and procedures, perform counts and reviews, and reconcile inventory balances, we may have to qualify our opinion on the financial statements for fiscal year 2000.

#### Improve Inventory Management

During our review of inventory, we found a number of procedures that appear to create a significant amount of work and complicate the maintenance of accurate inventory records, and we believe management should review and consider changing some of these procedures.

Several of the policies and procedures do not appear to weigh the cost of control over the actual value of the asset. The cost of internal controls should not exceed the value of the asset under protection. At times, it appears the system provides information on what is available without recognizing the cost and resources necessary to gather and keep that information.

During the statistical sample testwork, we made the following observations.

- The inventory turnover rate is low and during fiscal year 1999, Transportation had purchases of \$39,703,125 with a year-end inventory balance of \$36,883,727, or a turnover ratio of 1.08. This means that inventory turned over only one time during the year.
- We found thirty-five percent (35%) of stock items had no activity during the past year and some items had no activity since 1992.
- Approximately forty-two percent (42%) of the inventory items listed by location had no items on hand. District personnel receive printed reports of inventory to manage this function. Therefore, the volume of blank items significantly reduces the value of the reports as a management tool.

- Projects using inventory items within 30 days have the goods delivered directly to the job without going into the inventory system.
- If a project does not use inventory items, district personnel enter these items with a zero dollar value. Approximately nine percent (9%) of the inventory items have a zero dollar value.
- District personnel inconsistently assign values to 'found' items or record them as new items with no value. Found items occur when district personnel return items to inventory stock locations but do not re-enter the items into PIMS or they find the items during sample inventory counts.
- Districts maintain emergency inventory items. The districts use most of this material only during emergencies, but must apply all the same procedures monthly to these items as they do to the rest of the inventory.
- During the implementation of FMSII, district personnel did not have a procedure to correct inventory data entry errors. In several instances, district personnel corrected data entry errors by creating fictitious issuance or receiving entries.
- District personnel improperly and inconsistently apply shipping and handling to store stock inventory.

Administrative Services Division (ASD) directs most of its efforts toward the operation and management of inventory, but does not work closely with the Financial Accounting and Reporting Division to ensure the financial information is accurate for financial statement reporting purposes.

The implementation of FMSII gives Transportation the opportunity to improve its inventory management practices. Changing some items like providing district personnel with a report or computer file that includes only inventory items that have a quantity would improve their ability to focus on active inventory. Also, separating routine inventory items from emergency items would aid this process. District personnel would not spend resources on inventory that has little or no activity.

These are only two examples of changes that could assist District personnel in maintaining inventory information. Since ASD has not completely updated its inventory policies and procedures manual since 1992, they have the opportunity to implement a number of similar changes that could streamline the maintenance of records, reducing resources needed to keep inventory records current.

Our observations above highlight a need for Transportation to reconsider its policies and procedures over the inventory system and the cost and resources necessary to gather and maintain information. Transportation, in reexamining these policies and procedures, needs to determine that the cost of the internal controls does not exceed the cost of the assets under control.

ASD should work with District personnel, Financial Accounting and Reporting, and internal audit staff to review its inventory policies and procedures. During this process they could address not only the effects of the problems above, but also the source of these problems. Using the new system, Transportation can reexamine those policies and procedures so that they maintain and improve inventory management.



## Financial Operations

### Develop Policies and Procedures

Transportation implemented its new financial system but does not have written policies and procedures supporting many of its financial functions. The audit found written policies and procedures do not exist for areas such as PIMS Inventory functions, Financial Statement Preparation, Payroll, Fixed Assets, Accounts Payable, and Internal Service.

Without written policies, agency personnel are not aware of all procedural changes and do not have the resources to identify policy changes. Without proper guidance, employees may be susceptible to making material errors.

Management does recognize the importance of these procedures and did develop a multi-stage process. Prior to implementation of FMSII, management developed training manuals to use in conjunction with “hands-on” computer based training. During the initial implementation, hardware and software modifications were the highest priority. These changes impacted both transactional and reporting processes. Since implementation, Transportation has focused on completing all adjustments and modifications and will then finalize policies and procedures.

Management should ensure the completion of written policies and procedures for all financial functions. Management should properly train employees in what those policies and procedures state.

### Reconcile Transportation's and the Commonwealth's Financial Systems

The Financial Accounting and Reporting Division did not reconcile Transportation's Financial Management System (FMSII) and the Commonwealth Accounting and Reporting System (CARS) timely throughout fiscal year 1999. Further, Financial Accounting and Reporting did not adjust CARS each month and at year-end for reconciling items to bring the two systems into agreement, resulting in misstated account balances in CARS. Excessive reconciling items continue to appear each month.

Transportation's implementation of FMSII on September 1, 1998, resulted in extensive reconciling items between FMSII and CARS. Because of the volume of reconciling items, Transportation could not stay current with the reconciliations. Transportation could not reconcile September's transactions until January 1999. This pattern continued throughout the year with Financial Accounting and Reporting completing monthly reconciliations one to five months late.

The Commonwealth Accounting and Reporting System is the official accounting system for the Commonwealth. However, Transportation relies on FMSII to produce its financial statements, which the Department of Accounts uses to prepare the Comprehensive Annual Financial Report for the Commonwealth. Transportation focuses its efforts to ensure FMSII, not CARS, is accurate. However, the legislature and other state agencies use CARS to obtain financial information to make decisions throughout the year. Therefore, it is imperative that Financial Accounting and Reporting ensure both systems contain accurate information.

Financial Accounting and Reporting needs to perform timely reconciliations and post adjustments immediately to both systems monthly and at year-end. Management must also identify the types and causes of errors and focus on correcting the cause to minimize the number of differences and expedite the reconciliation process in the future.

## FINANCIAL STATEMENT PREPARATION AND DISCLOSURES

### *Monitor and Comply with Accounting and Reporting Standards and Properly Prepare Financial Statements*

Transportation has devoted significant resources to produce financial statements and receive an unqualified auditor's opinion. Management believes that they must produce these financial statements because of bond indenture agreements. We commend Transportation for its efforts to produce these financial statements; however, our audits continue to find material errors in the preparation and presentation of information. While we have worked with Transportation to correct these errors, they continue to highlight the need by Transportation and its financial staff to maintain its knowledge of standards and incorporate this information into the production of statements.

Generally accepted accounting principles have undergone a number of changes in the past several years and significant changes will occur under GASB Statement 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, for fiscal 2002. GASB Statement 34 may make it impossible for Transportation to prepare financial statements that could receive an unqualified auditor's opinion.

Transportation is a component unit of the Transportation Trust Fund and the Commonwealth of Virginia. The financial reporting requirements of GASB 34 may require that the lowest level of reporting be a major fund which could prevent the presentation of financial statement information at Transportation's current level of reporting. Alternatives could include the preparation of statements for the entire Transportation Trust Fund for all agencies in the fund or a special report that does not meet the new GASB 34 requirements, but shows a different basis of accounting with an opinion qualification.

Due to the new GASB 34 requirements, the financial staff may face the challenge of preparing two sets of information each year. One set of financial information would be for inclusion into Transportation's statements and the second for the State Comptroller's statewide financial statements. The single most important part of the State Comptroller's information is infrastructure data, which must come from Transportation.

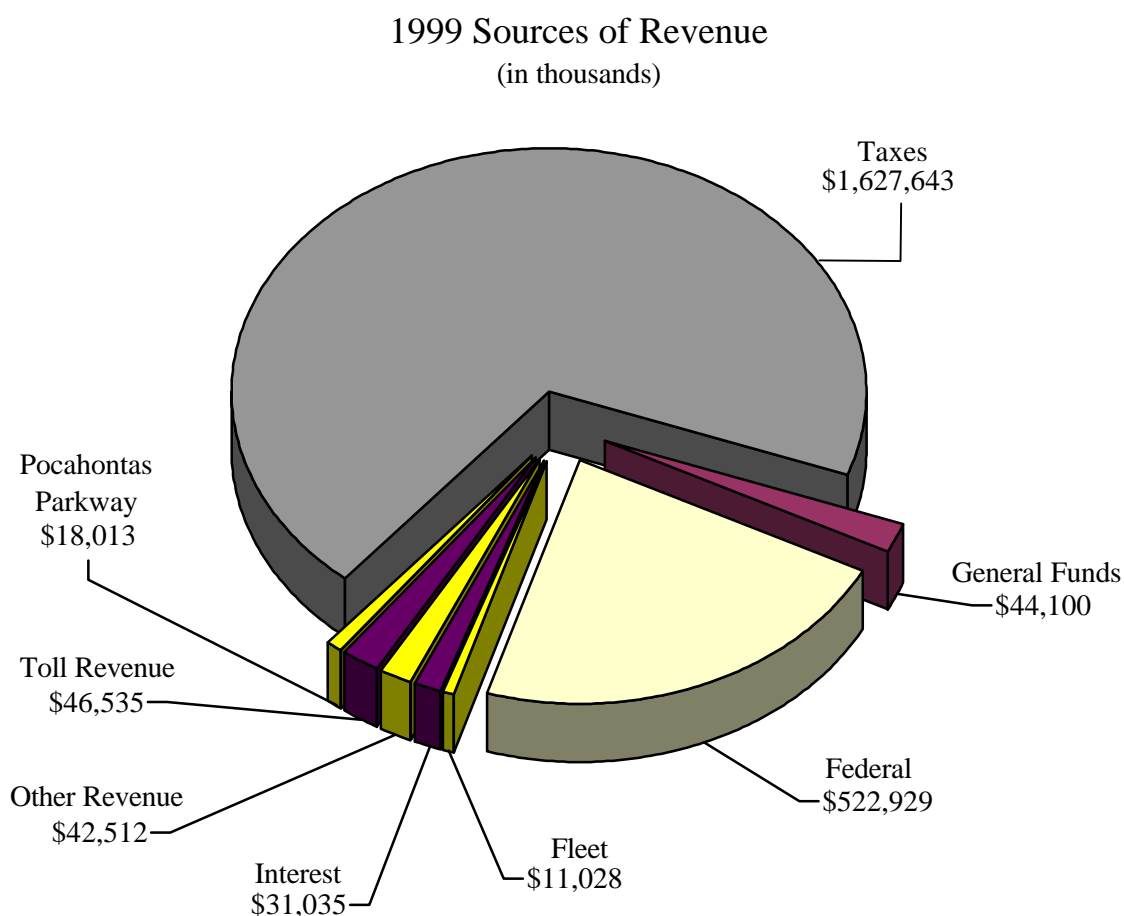
Financial staff will need to identify and resolve financial reporting issues not only for themselves, but work with the State Comptroller to do the same for the Commonwealth. To date, the staff has not demonstrated their ability to research and resolve complex accounting issues. They have depended on either the State Comptroller or the audit staff to resolve financial issues during the financial preparation process. Considering the nature of the issues facing Transportation, this method of problem identification and resolution will not work in the future.

One such key issue, as discussed above, centers on Transportation's ability to issue financial statements and receive an unqualified auditor's opinion after the implementation of GASB Statement 34. Even if Transportation can issue financial statements, the changes are so substantial that the financial staff will need to restructure how they do most of their work.

We, therefore, recommend that management work with the financial staff to begin developing a working plan to address these issues. This plan will require Transportation to work with both the auditors and the State Comptroller's staff. Also, the staff may need to work with the staff of the State Treasurer to further define and incorporate the needs of the bondholders. Transportation is facing a number of changes in financial reporting that requires that they begin now to properly address and implement the changes.

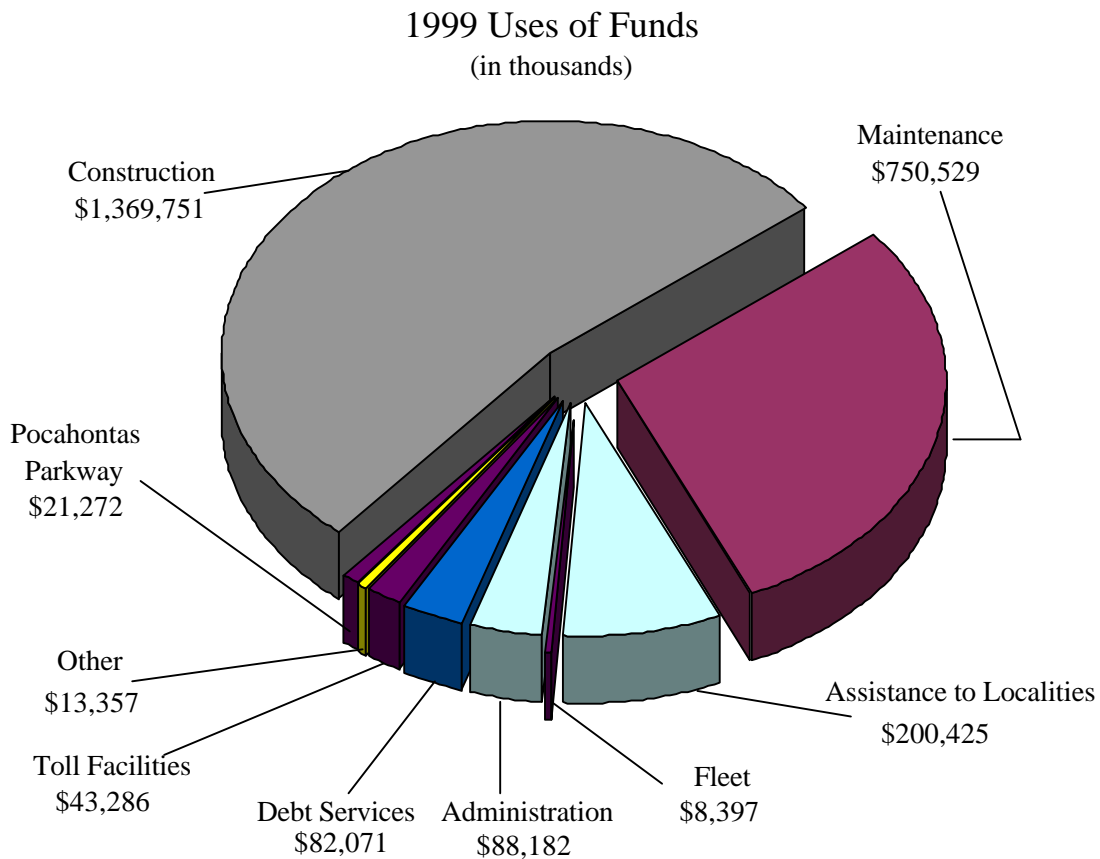
### Financial Information

Transportation's main source of funding is its allocation from the Transportation Trust Fund. Revenues collected by the Departments of Motor Vehicles and Taxation from taxes, licenses, and vehicle registrations fund the Transportation Trust Fund. Transportation received 78.9 percent of Trust Fund revenues collected, which is further allocated within Transportation to the paving of non-surface treated secondary roads and constructing, reconstructing, maintaining, and improving primary, urban, and secondary road systems. The remaining 21.1 percent of Transportation Trust Fund revenue goes to the Mass Transit, Port, and Airport Funds. Transportation's funding sources, including its Transportation Trust Fund allocation, are illustrated below:



*(Source: Cash basis statement of revenues and expenditures for Special Revenue, Internal Service, and Debt Service. Pocahontas Parkway revenues were obtained from the component unit's financial statements that were audited by other auditors.)*

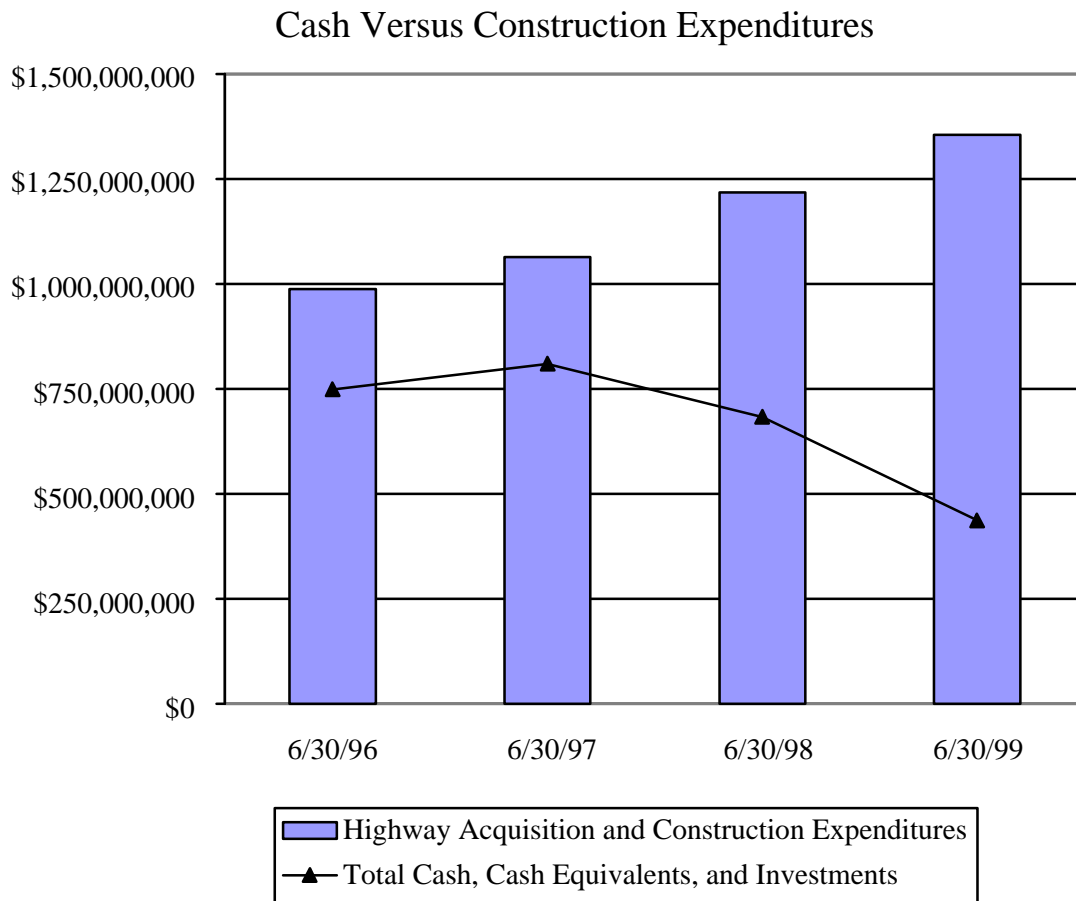
Transportation expended over \$2.5 billion in fiscal year 1999 with over 90 percent of those expenses going towards construction, maintenance, and assistance to localities. The remaining 10 percent of expenditures were for administration, toll facilities, debt service, and other expenses as illustrated in the following chart:



*(Source: Cash basis statement of revenues and expenditures for Special Revenue, Internal Service, and Debt Service. Pocahontas Parkway revenues were obtained from the component unit's financial statements that were audited by other auditors.)*

### Cash Shortfalls

During fiscal 1999, Transportation experienced a cash shortfall due to an increase in the volume of expenses. Since most of Transportation's highway construction projects take several years to complete, historically Transportation has had unspent funds reserved for these projects. Furthermore, mild winters and the passage of the federal Transportation Equity Act of the 21<sup>st</sup> century have permitted Transportation to increase highway construction. This increase in construction activity occurred without the historical build up of cash during the winter and early spring months. Consequently, fund balances and cash balances have declined throughout the year. In addition, Transportation maintains that bond agreements restrict cash.



*(Source: Cash basis financial statements. Does not include financial information for Pocahontas Parkway.)*

The cash shortfall affected operations of the agency in several ways. First, the lack of available cash restricted many construction projects' spending and could result in delays for project completion dates. Secondly, it delayed the start dates for new projects. Transportation expects the cash shortfall to carry over to fiscal 2000.

To help alleviate the cash shortfall, Transportation requested a \$200 million loan from the Department of Accounts in October 1999. If approved, the treasury loan will cover the cash shortfalls, but not expand existing programs. Transportation also amended the Six-Year plan to be less aggressive on current construction spending and on establishing new projects. The Governor has proposed for the General Assembly's consideration the use of the Tobacco Settlement Fund and the issuance of bonds backed by federal revenue called Grant Anticipation Revenue Vehicle (GARVEE) bonds to fund highway construction needs.

## **OTHER DEPARTMENT ISSUES AND INFORMATION**

### **Information Systems Update**

Transportation's management developed and approved a 4-year plan covering 2000 to 2004. The Technology and Information Management Program Strategic Plan was approved in September 1999. This plan builds and improves on the 1998-2000 plan. Strategic efforts include addressing the planning, financing, construction, and maintenance of transportation projects. Other efforts include the recognition of the importance of technology to successfully accomplish established goals and missions. The plan places significant emphasis on the use of technology to achieve agency objectives.

The Windows NT operating environment provides a home for some of the most critical and sensitive portions of Transportation's information technology resources. NT manages initial user authentication, provides a host for the agency's e-mail system, serves critical file and print sharing needs, and provides program executables for the agency's financial systems.

#### **Improve controls over the Windows NT environment**

Despite the criticalness of Windows NT systems and networking to the agency, management has not adequately secured its implementation. Weaknesses in security management begin with non-secure desktop operating systems and extend through inadequate password controls. Additional concerns include failure to maintain current service releases, failure to review directory and file security on an ongoing basis, poorly managed implementation of the Remote Access Server, inappropriate use of default user accounts, and the inappropriate assignment of system rights to individual users or groups.

Establishing appropriate security policies is a key first step for implementing a comprehensive structure for securing access to the agency's sensitive data and critical information systems. Management should establish policies and procedures that ensure a comprehensive, continuous security review program. The program must understand and address both global and individual user needs.

#### **Improve Physical Security Controls**

Transportation uses a room adjacent to the computer room to house the Central Office Domain's Windows NT Primary Domain Controller and Back-up Domain Controller Servers among other servers. This room is not properly equipped to handle fire detection and suppression, moisture detection and flooding. The room also lacks adequate air conditioning and an uninterruptable power supply. Additionally, Transportation allows improper access to the computer center with 244 employees having access to the facility.

Management should take the appropriate steps needed to ensure that adequate physical controls exist to protect the computer center from possible destruction and unauthorized entry.

### **Fixed Assets**

Transportation classifies its fixed assets into 4 categories: Equipment, Land, Buildings, and Construction in Progress. Equipment includes 3 separate types of equipment: rental, data processing, and major equipment. Rental equipment includes items such as dump trucks and heavy equipment. Data processing includes hardware and software. Major equipment includes all items not included in the rental and data processing items such as cranes, tanks, lifts, and hydraulic equipment.

### Perform Physical Inventory For Major Equipment Fixed Assets

Transportation has not performed a physical inventory for major equipment since 1996, and this represents more than \$19 million in fixed assets.

The Commonwealth Accounting Policies and Procedures requires performance of a physical inventory at least once every two years. A physical inventory for fixed assets is important in order to properly safeguard assets and maintain fiscal accountability. Management should also consider developing a schedule indicating when inventories are due to ensure compliance and accountability.

### Highway Construction

During fiscal 1999, Transportation spent over \$1.3 billion on highway construction projects. Building a road is a time-consuming process that includes years of research, planning, design, engineering, and budgeting. Project monies come from federal funds and state revenues. Transportation maintains approximately 55,600 miles of highway, primary and secondary roads and assists localities with about 9,900 miles of urban streets.

Construction projects go through four major phases: initiation, pre-construction, construction, and maintenance. The initiation phase identifies the project as a priority and is then approved by the Commonwealth Transportation Board and included in the six-year plan. The pre-construction phase can be the longest phase and includes planning, design, assessment of environmental impacts, purchase of materials, purchase of property, traffic engineering, evaluation of structures and bridges, and coordination of utilities. The construction phase includes the complete construction of the project. Upon completion of construction, the maintenance of the road becomes the responsibility of the residency maintenance forces at the district level, which is the last phase of a project.

Two major projects currently under construction are the Springfield Interchange and the Route 895 Connector.

#### Springfield Interchange

Transportation identified the Springfield Interchange as one of the busiest interchanges in the country and the most dangerous spot on the Capital Beltway. Because of this, Transportation embarked on a massive construction project to make the interchange safer, less congested, and more manageable. The new and improved interchange will separate local traffic, making it easier for commuters to get to work and travelers to pass through the area.

The project will cost about \$350 million and could last up to eight years, affecting thousands of commuters. It is the highest dollar, non-bridge or tunnel project Transportation has ever undertaken. Because of the project's magnitude and cost, as well as the need to keep the existing roadways open during construction, Transportation is making the improvements in eight stages. Each stage will have a separate contract. Transportation has completed portions of the first two phases, and has begun portions of phases three and four, which focus on the reconstruction of the Route 644 interchange. Later phases (four through eight) of the project will improve I-95, the Beltway interchange, portions of the Beltway, and the HOV lanes.

Transportation is offering a \$10 million bonus to the contractor for the reconstruction of the Route 644 interchange if the contractor completes the work by August 18, 2001. If the contractor misses this deadline but finishes by November 17, 2001, he will receive \$5 million. The bonus is the largest in Virginia history. The bonus allows for recovery of overtime and other costs the contractor incurs plus approximately a ten-percent profit incentive. In contrast, the incentive program also provides a \$30,000 per day penalty for

each delayed workday past the June 1, 2002 deadline. Transportation will assess other penalties, such as lane closures during peak hours, on a day-by-day basis. Transportation anticipates offering similar incentive programs for each of the remaining contracts.

#### Pocahontas Parkway (Route 895)

The Route 895 connector is a project under the Public Private Transportation Act (PPTA) which enables the Commonwealth and local governments to enter into agreements authorizing private entities to acquire, construct, improve, maintain, or operate qualifying transportation facilities. The PPTA provides the private entity the ability to issue tax-exempt bonds to finance the projects. Transportation entered into a comprehensive agreement in June 1998 for the private development of the Route 895 connector with FD/MK Limited Liability Company. FD/MK created the Pocahontas Parkway Association to assist with the financing of the project.

Financed and constructed by the private entity, Pocahontas Parkway Association, the Route 895 connector will be a nine mile, four lane limited access toll road extending from the current eastern terminus of Chippenham Parkway at Interstate 95 to a connection with Interstate 295, southwest of Richmond International Airport. Construction began this fiscal year. Various agreement provisions outline Transportation's responsibilities such as the approval of project budgets, toll rates, and debt issuance. The \$354 million in bonds issued in July 1998 to finance the project are tax-exempt and are not a debt of the Commonwealth, Transportation, or any other agency. The road will become operational during 2002.

#### New Federal Transportation Legislation – TEA 21

The President signed TEA-21, or the Transportation Equity Act for the 21<sup>st</sup> Century, into law on June 9, 1998. Overall, the funding level in the legislation provides for an annual highway program increase of 44 percent nationally. Summary information indicates Virginia will receive an annual average of \$664 million in formula apportionments and demonstration project funding over the life of the bill (1998-2003). In contrast, Virginia received an average of \$415 million annually over the life of the old legislation (1992-1997). This represents a dollar increase of almost 62 percent for the Commonwealth, as well as a 13 percent increase in the state's share of overall federal highway funding.

Transportation identified several special funding provisions under TEA-21 that will significantly impact the Commonwealth:

- \$900 million for the replacement of the federally-owned Woodrow Wilson Bridge
- \$86 million in transit funding for the Washington-Dulles Corridor transit project
- \$13 million for traffic calming measures in Loudoun and Fauquier Counties

#### Roadway Maintenance

Transportation is working on a "perform versus contract" model to assist the decision making process for maintenance. Transportation anticipates completion of the model during calendar year 2000. Currently, Transportation personnel or contractors perform all maintenance projects. The decision to contract a maintenance activity rests at the district or residency level depending on the scope of the work, the project needs, and project costs. One factor affecting the decision is whether the request comes in from the public in which case Transportation uses its personnel to conduct the maintenance. However, private contractors perform most long-term maintenance projects. Teams at each district or residency have responsibility for weighing the benefits of either contracting or performing in-house maintenance. The new model should aid this process.



### Contracting

Management continued its efforts to provide services through contracts with private vendors. The following are highlights of the contracting to date:

- Approximately three years ago, Transportation began the process of determining the cost effectiveness of contracting personal computer services. Management formed a committee and their preliminary cost benefit analysis identified the possibility of significant cost savings. The current proposals include leasing services, configuration services, maintenance, swaps, and disposal. Under this proposal, the vendor would eventually replace and upgrade all of Transportation's 7,000 personal computers.

The committee awarded the pilot contracts in August 1998, and evaluated the results, which resulted in statewide implementation on November 17, 1999. The Executive Team considered the recommendations of the META Group who conducted the evaluation. This evaluation included cost savings and significant customer satisfaction ratings resulting in a three-year contract.

- Transportation executed a comprehensive agreement in December 1996 with Virginia Maintenance Services (VMS). This contract is a five and a half-year pilot to provide maintenance of designated sections of the interstate highway system. VMS is maintaining 104 miles of interstate 95 from the North Carolina border to Hanover County. Management anticipates that this program will save \$22 million over the pilot period. Management moved 74 employees displaced by this contract from interstate maintenance to other maintenance operations services.
- The Management Services Division expanded the pilot contract with NAPA for warehouse services and equipment repair parts to include the Fredericksburg and Bristol Districts with a two and a half year extension to March 31, 2000. Implementation of FMSII caused a delay of operations at the Fredericksburg and Bristol districts; therefore, management extended the pilot program to June 2000. A review of the pilot after June 2000 will determine whether to extend the pilot to additional districts. Some re-assignment of employees has occurred as a result of the expansion of the pilot.
- Due to drier weather and availability of in-house employees, Transportation used more of its own staff for mowing services. As a result, Transportation has decreased the amount of mowing contracts and increased in-house mowing services continuously since 1997.
- Transportation conducted a one-year pilot program that contracts tire management services for the Fredericksburg District. Transportation finished compiling data in November 1998 and has concluded that the program was a success as it will reduce costs and provide quality products. Therefore, the Fredericksburg District entered into a 4-year contract. Other districts are implementing a similar program.

It is the Commissioner's policy that Department employees will not lose their jobs to outside contractors. In the instances above, managers reassigned displaced employees to other areas within Transportation.

#### Toll Facilities and Smart Tag

Transportation implemented SMART TAG on April 15, 1996, and has issued over 230,000 transponders. SMART TAG is accounting for approximately 220,000 transactions per day. SMART TAG is an electronic toll collection system that lets customers pay without stopping at toll booths. As the vehicle approaches the tollbooth, the system electronically reads a transponder on the inside of the vehicle and automatically deducts the toll from a pre-paid account. Currently, the system is available for use on the Hirst-Brault Expressway, the George P. Coleman Bridge, the Dulles Greenway Toll Road (privately owned and operated), the Powhite Parkway Extension, and all toll facilities maintained by the Richmond Metropolitan Authority (RMA).

Transportation has also set up SMART TAG customer service centers throughout the state to process applications for credit, sell transponders to customers, collect all payments, maintain customer accounts, and transfer revenues to the appropriate toll roads. Transportation's internal audit department conducted an audit between April 1997 and May 1998 to review the internal controls over the Smart Tag Customer Service Center (SCSC) and the Cash Control at Dulles Toll Road. Below are the concerns Transportation has not addressed to date:

#### Improve Controls over SMART TAG policies and procedures

- Smart Tag contract and toll facility administration:  
The Fiscal Division serves as Transportation's contract administrator for the Smart Tag Customer Service Center contract. However, there is no Central Office function overseeing the toll facilities. The district in which the toll is located maintains and operates the toll facility. Since there is no one central or main body overseeing the toll facilities, there is a tendency for each toll facility to handle the identical problem in a completely different manner. Management should establish a central toll facility manager to oversee all activities involving toll roads including new projects, setting statewide policy, and being the SCSC contract administrator. Additionally, the central toll facility manager should work to implement toll facility programs to promote efficiency and revenue generation.
- Monitoring/Collection of Smart Tag patron violations:  
The Advanced Revenue Collection System (ARCS) does not provide reports on negative balance accounts. Smart Tag patrons who deplete their accounts and continue to go through the tolls are violating the system. Since the system is unable to identify the violating patrons and when they violate the system, revenue is lost daily. After review of the June 1999 violation report, Transportation determine it would be cost effective to track and collect this toll revenue. As a result, they developed a violation system independent of ARCS and are currently implementing the system in Northern Virginia. Transportation should continue with the implementation of the new violation system in Northern Virginia and throughout the state.
- Cash Control – Dulles Toll Road:  
Transportation has still not implemented procedures concerning the toll collection system expected in September 1998. The implementation of FMSII had taken time

away from finalizing the other system. Appropriate personnel are not receiving and investigating unexplained shortages from the tolls.

Management should address the issues regarding the Smart Tag policies and procedures and continue monitoring them to ensure issues will not resurface.

### Towers

Transportation began building towers for use in their traffic management program in the late 1980s. The cellular phone companies became involved in 1996 with the enactment of the Telecommunication Act of 1996 that allowed the phone companies to construct cellular towers on Department-owned land.

The phone companies build the towers next to the interstates so that Transportation can use its cameras to monitor traffic. The phone companies pay for all construction-related expenses including site preparation. However, Transportation may incur expenses for staff who meet with the phone companies or visit the site to ensure it is suitable for building. The phone companies incur all costs for equipment used on the towers, including equipment used by Transportation. Transportation will compensate this expense by deferring rent payments dollar for dollar until the phone companies have recovered the cost of the equipment. Phone companies using the towers that did not incur costs related to the construction of the tower will begin to pay rent when the company begins to use the tower.

Currently, the phone companies build the towers next to interstates so that Transportation may use their cameras to monitor traffic conditions. Northern Virginia and the Tidewater areas utilize these cameras. Transportation plans to begin using the cameras in Richmond in the future. Transportation's Incident Management Program will use the cameras to confirm accidents, determine lane closures, dispatch emergency response, and monitor HOV lanes in Northern VA. Transportation will also use the towers for variable messages along the roadway, displaying messages on a computer screen that can alert drivers to problems or inform them of roadway conditions. Also, the towers provide lighting for roadways and 2-way communication on new sites for road maintenance. Transportation also anticipates that wireless towers will connect traffic signals for better traffic movement as well as communication with vehicles that have navigation systems installed within their vehicles.

The Transportation Trust Fund records the revenue collected for tower rental and during fiscal 1999 and 1998, collections were approximately \$450,000 and \$100,000 respectively. Transportation has the potential to collect \$1.5 million in revenues from the towers in place.

In November 1999, the State Supreme Court ruled that the phone companies must receive approval from localities before they can build towers on Transportation-owned land. Before this ruling, the phone companies did not need local approval before constructing a tower. The court did state that the phone companies still might use the leased land as long as they submit and receive approval from local planning commissions. Transportation expects the cellular phone companies to build 83 towers and plan for an additional 30 on its right-of-way.

December 17, 1999

The Honorable James S. Gilmore, III  
Governor of Virginia  
State Capitol  
Richmond, Virginia

The Honorable Richard J. Holland  
Chairman, Joint Legislative Audit  
and Review Commission  
General Assembly Building  
Richmond, Virginia

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND ON  
INTERNAL CONTROL OVER FINANCIAL REPORTING

We have audited the general purpose financial statements of the **Department of Transportation** as of and for the year ended June 30, 1999, issued our report dated December 17, 1999, and included it in the Financial Report issued by the Department of Transportation. We submit herewith our report on compliance and internal control over financial reporting.

In planning and performing our audit of the financial statements of Transportation as of and for the year ended June 30, 1999, we considered internal controls over financial reporting and tested compliance with certain provisions of laws, regulations, contracts, and grants in accordance with generally accepted auditing standards and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. We did not audit the financial statements of the Pocahontas Parkway Association, a blended component unit. The Association's financial statements were audited by other auditors whose report thereon has been furnished to us and our opinion, insofar as it relates to the Association's financial statements, is based solely upon the report of the other auditors.

Compliance

As part of obtaining reasonable assurance about whether Transportation's statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed an instance of noncompliance that is required to be reported under Government Auditing Standards. The instance of noncompliance, entitled "Perform Physical Inventory for Major Equipment Fixed Assets" is described in the section titled "Other Department Issues and Information."

### Internal Control Over Financial Reporting

In planning and performing our audit, we considered Transportation's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. However, we noted certain matters involving the internal control over financial reporting and its operation that we consider to be reportable conditions. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control over financial reporting that, in our judgment, could adversely affect Transportation's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. Reportable conditions are described in the sections titled "Internal Control Background, Findings, and Recommendations and Financial Information" and "Other Department Issues and Information."

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. However, of the reportable conditions described above, we consider "Improve Controls over Inventory Policies and Procedures to Prevent a Qualified Financial Statement Opinion" to be a material weakness.

### Status of Prior Findings

Transportation has not taken adequate corrective action with respect to the previously reported findings "Perform Independent Physical Annual Inventory Counts and Compliance Reviews" and "Monitor and Comply with Accounting and Reporting Standards." Accordingly, we included these issues in the findings entitled "Improve Controls over Inventory Policies and Procedures to Prevent a Qualified Financial Statement Opinion" and "Monitor and Comply with Accounting and Reporting Standards and Properly Prepare Financial Statements," respectively, in the section entitled "Internal Control Background, Findings, and Recommendations and Financial Information." Transportation has taken adequate corrective action with respect to audit findings reported in the prior year that are not repeated in this report.

### Report Distribution and Exit Conference

The "Independent Auditor's Report on Compliance and on Internal Control Over Financial Reporting" is intended solely for the information and use of the Governor and General Assembly of Virginia, the Transportation Board and management, and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

We discussed this report with management at an exit conference held on January 24, 2000.

AUDITOR OF PUBLIC ACCOUNTS

DBC:whb  
whb:66

DEPARTMENT OF TRANSPORTATION

Richmond, Virginia

As of June 30, 1999

Shirley J. Ybarra, Secretary of Transportation

David R. Gehr, Commissioner

James W. Atwell, Assistant Commissioner Finance

Gregory A. Whirley, Sr., Controller

COMMONWEALTH TRANSPORTATION BOARD

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